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(54) Title: A PRION-LIKE FORM OF CPEB AND RELATED COMPOSITIONS AND METHODS

(57) Abstract: The present invention provides methods for determining whether an agent facilitates the conversion of a cytoplasmic polyadenylation element binding (CPEB) protein from its non-prion form to its prion form. This invention also provides methods for determining the presence and amount of the prion form of CPEB protein in a cell. This invention also provides methods for facilitating the conversion of a non-prion CPEB protein to its prion form. This invention also provides an isolated prion form cytoplasmic polyadenylation element binding (CPEB) protein and compositions comprising a therapeutically effective amount of an agent that facilitates the conversion of CPEB protein from its non-prion form to its prion form, and methods of making such compositions.

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